

# KDC-1020/1020S KDC-119/119S

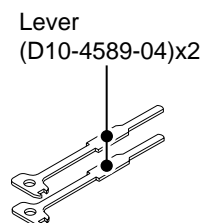
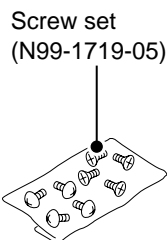
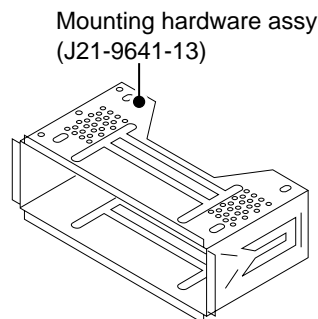
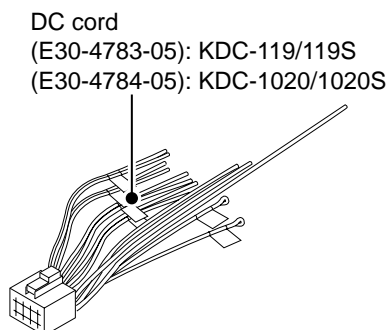
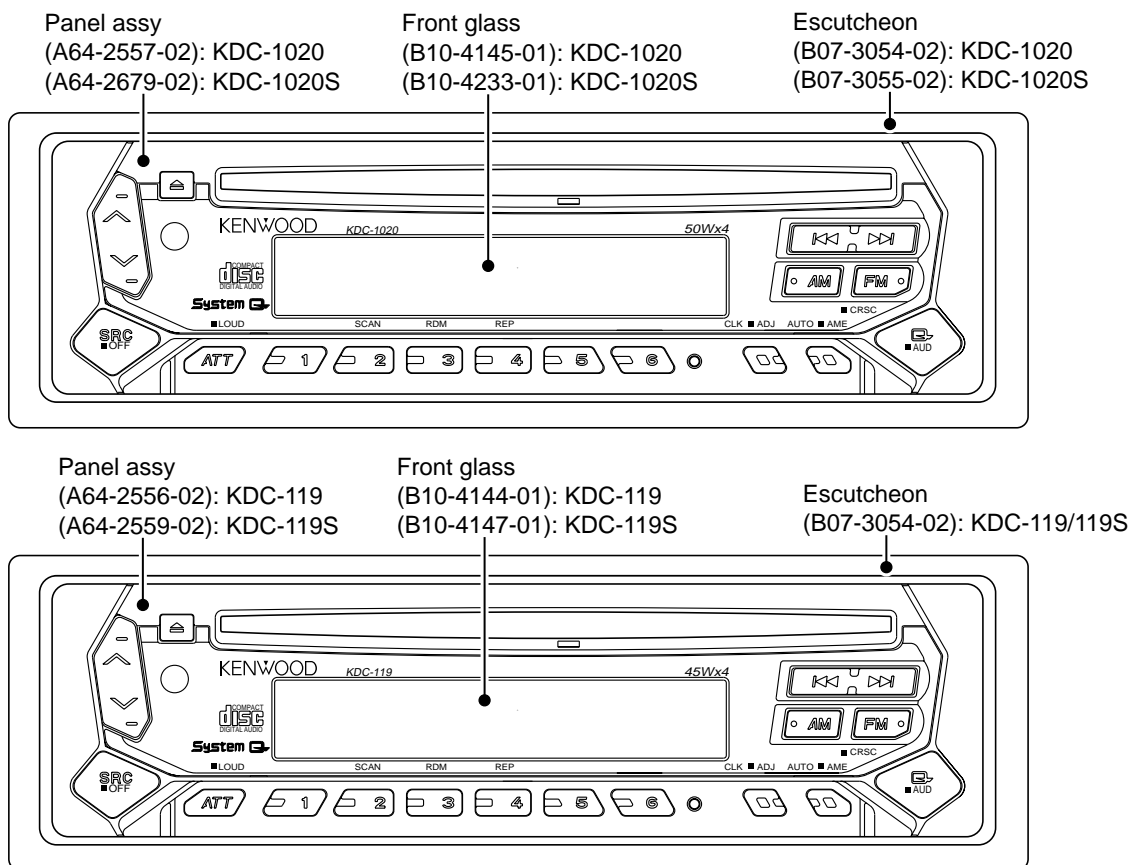
## SERVICE MANUAL

# KENWOOD

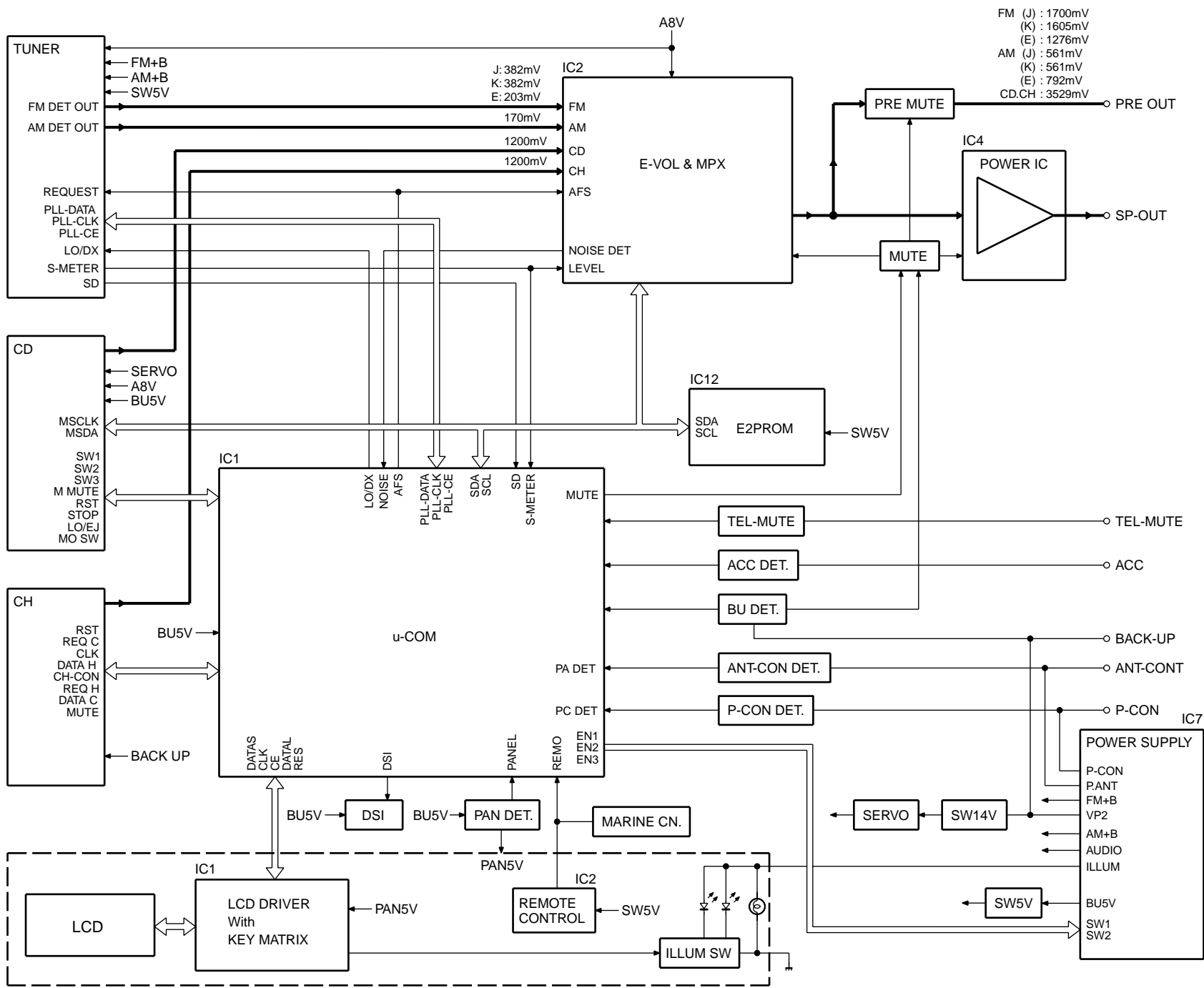
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B51-7875-00 (N) 1754

The CD mechanism information is not in this service manual.  
Please, refer to service manual X92-4030-0x (B51-7867-00).

CD mechanism extension cord : W05-0618-00



BLOCK DIAGRAM



## MICROCOMPUTER'S TERMINAL DESCRIPTION

SYSTEM MICROCOMPUTER  $\mu$ PD780058GC-XXX (IC1 : X25)

Pin No.	Pin Name	I/O	Purpose	Processing in STBY Mode
1	PANEL	I	Panel detection	Hi-Z
2	8EJE SW *1	I	8 cm disk eject end detection switch	L, L when the 8 cm CD compatibility is not provided.
3	NC	O	Not used	L
4	AVss	-	GND potential (for A/D and D/A)	-
5	L-RST	O	LCD driver reset	H, L when the panel is detached or with 7-segment output.
6	L-CE	O	LCD driver chip enable	L, L is output when the panel is detached.
7	AVREF1	I	5V power supply (D/A converter reference voltage)	-
8	NC	I	Not used	Hi-Z
9	PLL-DATA	I/O	F/E (IC3) communication data	L
10	PLL-CLK	O	F/R (IC3) communication clock	L
11	L-DATAL	I	LCD driver communication data (LCD)	Hi-Z
12	L-DATAS	O	LCD driver communication data (SYSTEM)	L, L is output when the panel is detached.
13	L-CLK	O	LCD driver communication clock	H, L is output when the panel is detached.
14	R-DATA	I	RDS DATA	Hi-Z, L when RDS is not available.
15	R-QUAL	I	RDS QUAL	Hi-Z, L when RDS is not available.
16	CH-DATAC	I	5-wire communication data (CH)	Hi-Z, L when CH is not available.
17	CH-DATAH	O	5-wire communication data (HEAD)	L, L when CH is not available.
18	CH-CLK	I/O	5-wire communication clock	Hi-Z, L when CH is not available.
19	CH-REQH	O	5-wire CH request (HEAD)	H, L when CH is not available.
20	PLL-CE	O	F/E chip enable	L
21	AFS	O	Noise detection time constant switching	L
22	LO/DX	O	Local seek switching	L
23~26	NC	O	Not used	L
27	SD	I	Station detection	Hi-Z
28	CH-CONT	O	5-wire communication CH ON output	L, L when CH is not available.
29	TYPE REF	O	Destination type and servicing setting 5V output	L
30	TYPE2	I	Destination type setting	Hi-Z
31	TYPE1	I	Destination type setting	Hi-Z
32	TYPE0	I	Destination type setting	Hi-Z
33	Vss1	-	GND potential (for other parts than ports and analog circuitry)	-
34	IC2TYPE1	I	Servicing pin (SEL1), normally "L"	Hi-Z
35	IC2TYPE0	I	Servicing pin (SEL0), normally "L"	Hi-Z
36	DATA	I/O	IC2, CD mechanism and F/E communication data	L
37	CLK	O	IC2, CD mechanism and F/E communication clock	L
38	MUTE	O	Muting control output	L, 15 sec. after power OFF.
39	P-MUTE	O	PWR IC muting output	H, 15 sec. after power OFF.
40	SVR	O	SVR control output	L
41	P-STBY	O	PWR IC standby output	L
42	SW5V	O	SW5 control output	"H" in 10 sec. after power OFF.
43	B.U-DET	I	B.U. detection	Hi-Z
44	ACC-DET	I	ACC detection	Hi-Z
45,46	NC	O	Not used	L
47~49	PS1-0~PS1-2	O	Power supply IC AUD/P.CON/P.ANT SW	L
50	BEEP	O	Buzzer output	L
51,52	PS2-0,PS2-1	O	Power supply IC ILL/AM/FM SW	L
53	DSI	O	DSI control output	L, H/L when panel is detached. FIX output is L.

## MICROCOMPUTER'S TERMINAL DESCRIPTION / ADJUSTMENT

Pin No.	Pin Name	I/O	Purpose	Processing in STBY Mode
54	LOE/LIM SW	I	CD mechanism Down & Limit detection	Hi-Z
55	MOSW	O	CD mechanism motor switching	L
56	LO/EJ	I/O	Lo/Ej switching	Hi-Z
57	M-STOP	O	Mechanism COM stop output	L
58	M-RST	O	Mechanism COM reset output	H
59	M-MUTE	I	Mechanism COM mute input	Hi-Z
60	RESET	I	System reset input	Hi-Z
61	REMO	I	Remote control input	Hi-Z
62	R-CLK	I	RDS CLOCK	Hi-Z, L when RDS is not available.
63	CH-REQC	I	5-wire CH request (CH)	Hi-Z, L when CH is not available.
64	LOS SW	I	Loading SW detection	Hi-Z
65	KEY-REQ	I	Key input detection	Hi-Z
66	12EJE SW	I	12 cm disc detection	Hi-Z
67	Vss0	-	GND potential (for ports)	-
68	VDD1	-	Positive power supply (for other parts than ports and analog circuitry)	-
69	X2	-	Main system clock oscillation	-
70	X1	I	Main system clock oscillation	-
71	IC	-	Flash uCOM write	-
72	XT2	-	Not used	-
73	XT1	-	Not used (Connected to 5V power supply)	-
74	VDD0	-	Positive power supply (for ports)	-
75	AVREF0	I	5V power supply (A/D converter reference voltage)	-
76	S-METER	I	S-meter input	Hi-Z
77	PHONE	I	Navigation muting 2.5V or more, Telephone muting 1V or less.	Hi-Z, L when TEL is not available.
78	NOISE	I	FM noise detection	Hi-Z, L when RDS is not available.
79	NC	O	Not used	L
80	AVCONT	O	A/D reference voltage control	L

## ADJUSTMENT

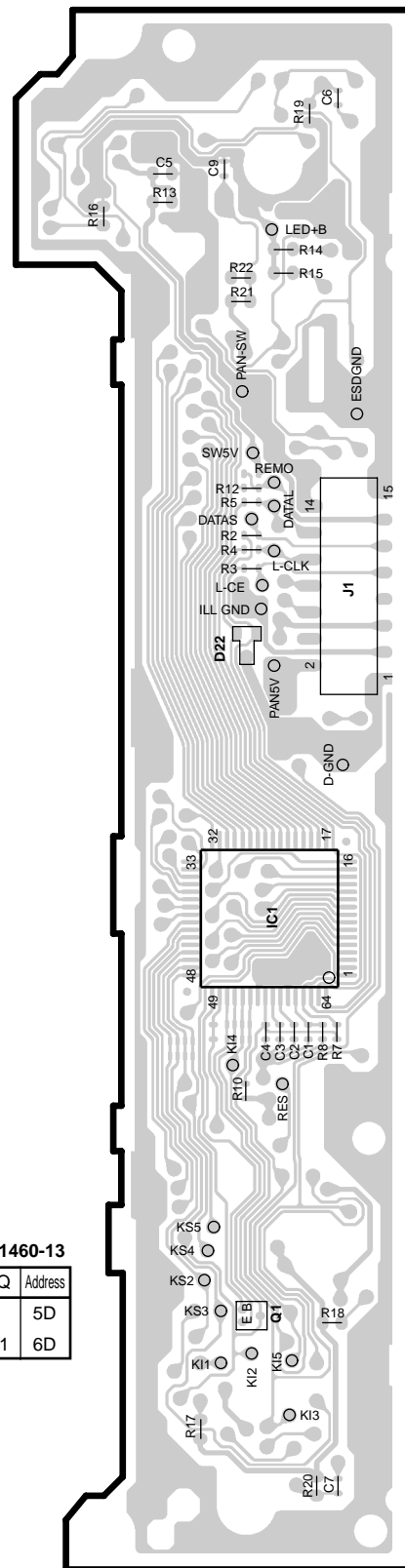
No.	ITEM	INPUT SETTINGS	TUNER (RECEIVER) SETTINGS	ALIGNMENT POINTS	ALIGN FOR
<b>FM SECTION</b>					
1	SD	98.1MHz 0 dev 35dBμ (ANT input)	TEST MODE : ON FM 98.1MHz	Preset "1" key, and preset "6" key	While holding preset "1" key, press and hold preset "6" key for a few seconds. "1111" is good. "0000" is not good.
<b>AM SECTION</b>					
(1)	SD	990kHz 0% mod 35dBμ (ANT input)	TEST MODE : ON AM 990kHz	Preset "1" key, and preset "6" key	While holding preset "1" key, press and hold preset "6" key for a few seconds. "1111" is good. "0000" is not good.

TEST MODE : ON While holding the FM key and preset "6" key, reset the unit.

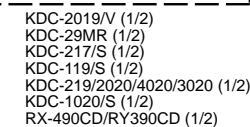
TEST MODE : OFF Reset the unit.

## 7

X25-9142-7x (J74-1368-12)  
X25-9120-xx/913x-xx (J74-1290-12)

6

Refer to the schematic diagram for the values of resistors and capacitors.



K

L

M

N

O

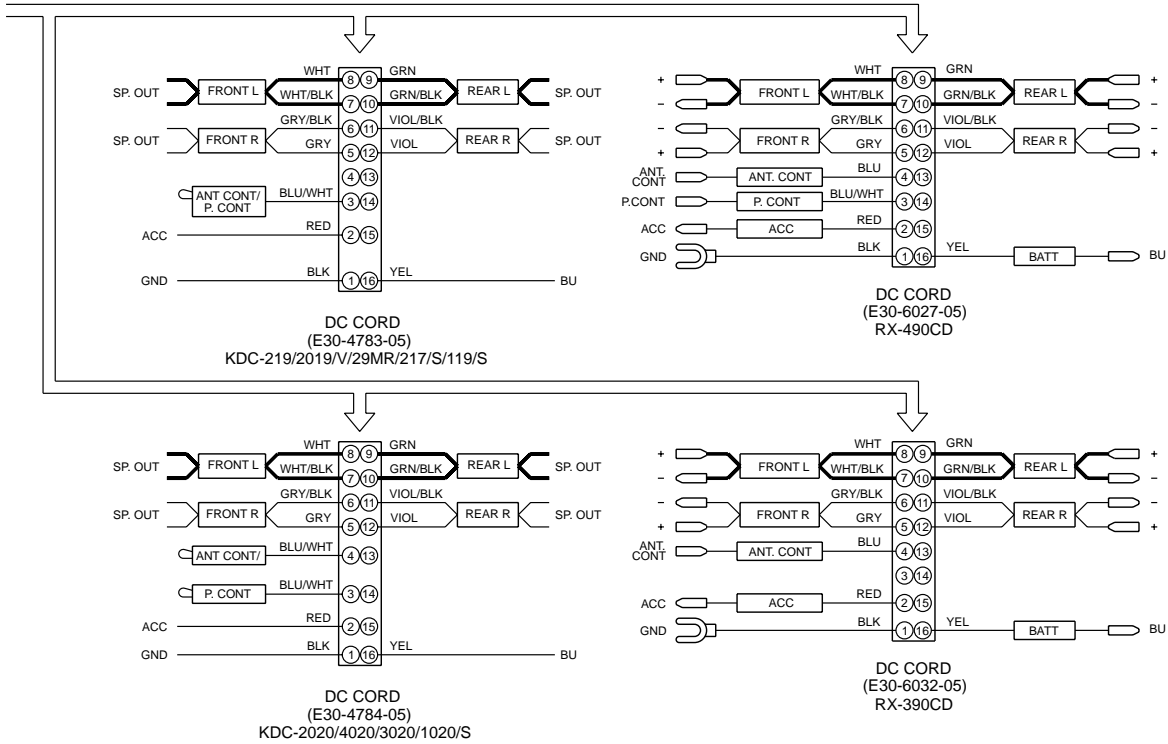
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Q

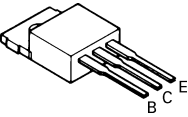
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S

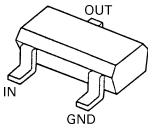
T



2SD2396



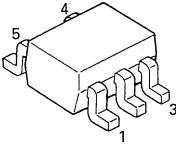
DTA114EUA  
DTA124EUA



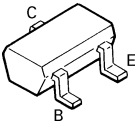
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DTC143TUA  
UN5111  
UN5216  
2SA1036K  
2SD1819A



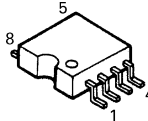
UMC2N



2SC4081



BR24C01AF  
BR24C01AF-W



(X25-912X-XX)

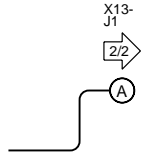
MODEL NAME	UNIT No.	(B)	(C)	(D)	(F)	C51	C256	C404	CN3	D11, 12	D13, 14	D106-110	D261-268	IC1 (UPD780058GCXXX)	IC4	J3	Q53	Q102	R25	R28
KDC-2020 (M)	0-20	YES	YES	NO	YES	YES	33u50	YES	NO	YES	YES	YES	YES	429	TDA7560	E58-0879	YES	YES	YES	YES
KDC-3020 (M)	0-11	YES	YES	NO	YES	NO	33u50	YES	NO	NO	YES	YES	YES	429	TDA7560	E58-0879	NO	YES	NO	YES
KDC-2019V (K)	0-16	YES	YES	YES	YES	NO	33u50	YES	NO	NO	YES	YES	YES	429	TDA7560	E58-0879	NO	YES	NO	YES
KDC-4020 (M)	0-21	YES	YES	YES	YES	YES	33u50	YES	NO	YES	YES	YES	YES	429	TDA7560	E58-0879	YES	YES	YES	YES
KDC-2019 (K)	0-12	YES	YES	YES	YES	NO	33u50	YES	NO	NO	YES	YES	YES	429	TDA7560	E58-0879	NO	YES	NO	YES
KDC-29MR (K)	0-13	YES	YES	NO	YES	NO	100u50	YES	YES	NO	YES	YES	NO	429	TDA7386	E58-0879	NO	YES	NO	YES
KDC-217 (K)	0-15	YES	NO	NO	YES	NO	100u50	NO	NO	NO	YES	YES	NO	429	TDA7386	E58-0879	NO	YES	NO	YES
KDC-217S (K)	0-15	YES	NO	NO	YES	NO	100u50	NO	NO	NO	YES	YES	NO	429	TDA7386	E58-0879	NO	YES	NO	YES
KDC-119 (K)	0-14	NO	NO	NO	YES	NO	100u50	NO	NO	NO	YES	NO	NO	430	TDA7386	E58-0880	NO	NO	NO	YES
KDC-119S (K)	0-14	NO	NO	NO	YES	NO	100u50	NO	NO	NO	YES	NO	NO	430	TDA7386	E58-0880	NO	NO	NO	YES
KDC-1020 (M)	0-22	NO	NO	NO	YES	YES	33u50	NO	NO	YES	YES	NO	YES	430	TDA7560	E58-0880	YES	NO	YES	YES
KDC-1020S (M)	0-22	NO	NO	NO	YES	YES	33u50	NO	NO	YES	YES	NO	YES	430	TDA7560	E58-0880	YES	NO	YES	YES
RX-490CD (J)	0-01	NO	YES	NO	YES	YES	100u50	YES	NO	YES	YES	NO	NO	429	TDA7386	E58-0880	YES	NO	YES	YES
RY-390CD (J)	0-02	NO	YES	NO	YES	YES	100u50	NO	NO	YES	NO	NO	NO	430	TDA7386	E58-0880	YES	NO	YES	NO

UNIT No.	R135	R136	R137	R138	R139	R140, 142	R170,171, 412-414	R173	R251-254, 260	R258	R261	R263	W83	W140,141, 176-178	W143	W179	A1 (F/E)
0-20	NO	YES	YES	NO	YES	NO	YES	NO	NO	220	10	4.3K	NO	YES	NO	YES	X86-3510-11
0-11	NO	YES	NO	YES	YES	NO	YES	NO	NO	220	10	4.3K	NO	YES	NO	YES	X86-3510-11
0-16	NO	YES	NO	YES	YES	NO	YES	NO	NO	220	10	4.3K	NO	YES	NO	YES	X86-3510-11
0-21	NO	YES	YES	NO	YES	NO	YES	NO	NO	220	10	4.3K	NO	YES	NO	YES	X86-3510-11
0-12	NO	YES	NO	YES	YES	NO	YES	NO	NO	220	10	4.3K	NO	YES	NO	YES	X86-3510-11
0-13	NO	YES	NO	YES	YES	NO	YES	YES	YES	100	430	180K	NO	NO	NO	YES	X86-3510-11
0-15	YES	NO	NO	YES	YES	NO	NO	NO	YES	100	430	180K	NO	NO	NO	YES	X86-3510-11
0-14	NO	YES	NO	YES	YES	NO	NO	NO	YES	100	430	180K	YES	NO	NO	YES	X86-3510-11
0-22	NO	YES	YES	NO	YES	NO	NO	NO	NO	220	10	4.3K	YES	YES	NO	YES	X86-3510-11
0-01	NO	YES	YES	NO	NO	YES	YES	NO	YES	100	430	180K	YES	NO	YES	NO	X86-3510-01
0-02	NO	YES	YES	NO	NO	YES	NO	NO	YES	100	430	180K	YES	NO	YES	NO	X86-3510-01

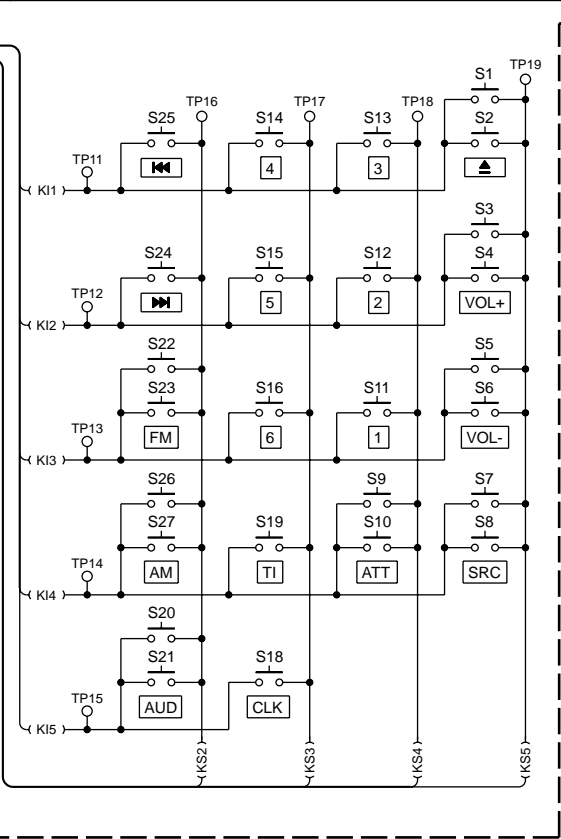
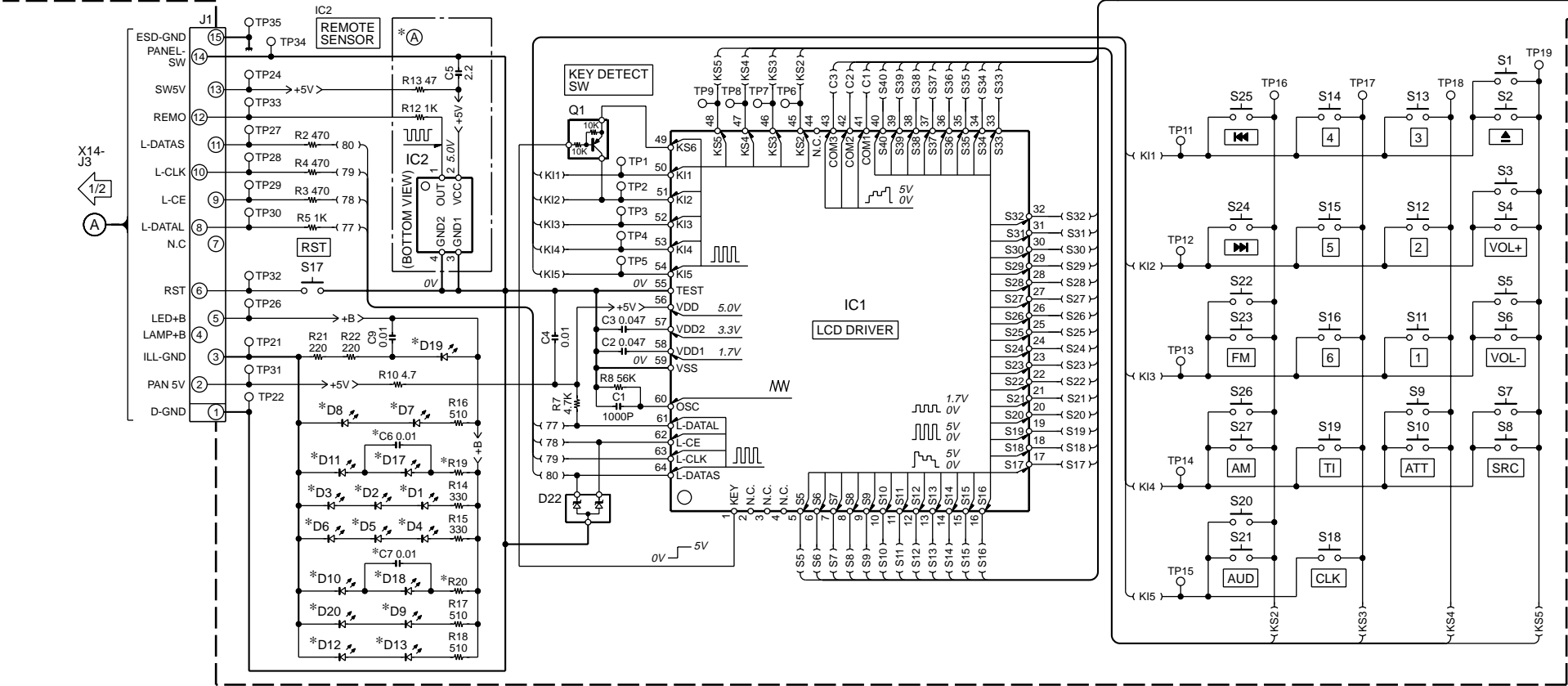
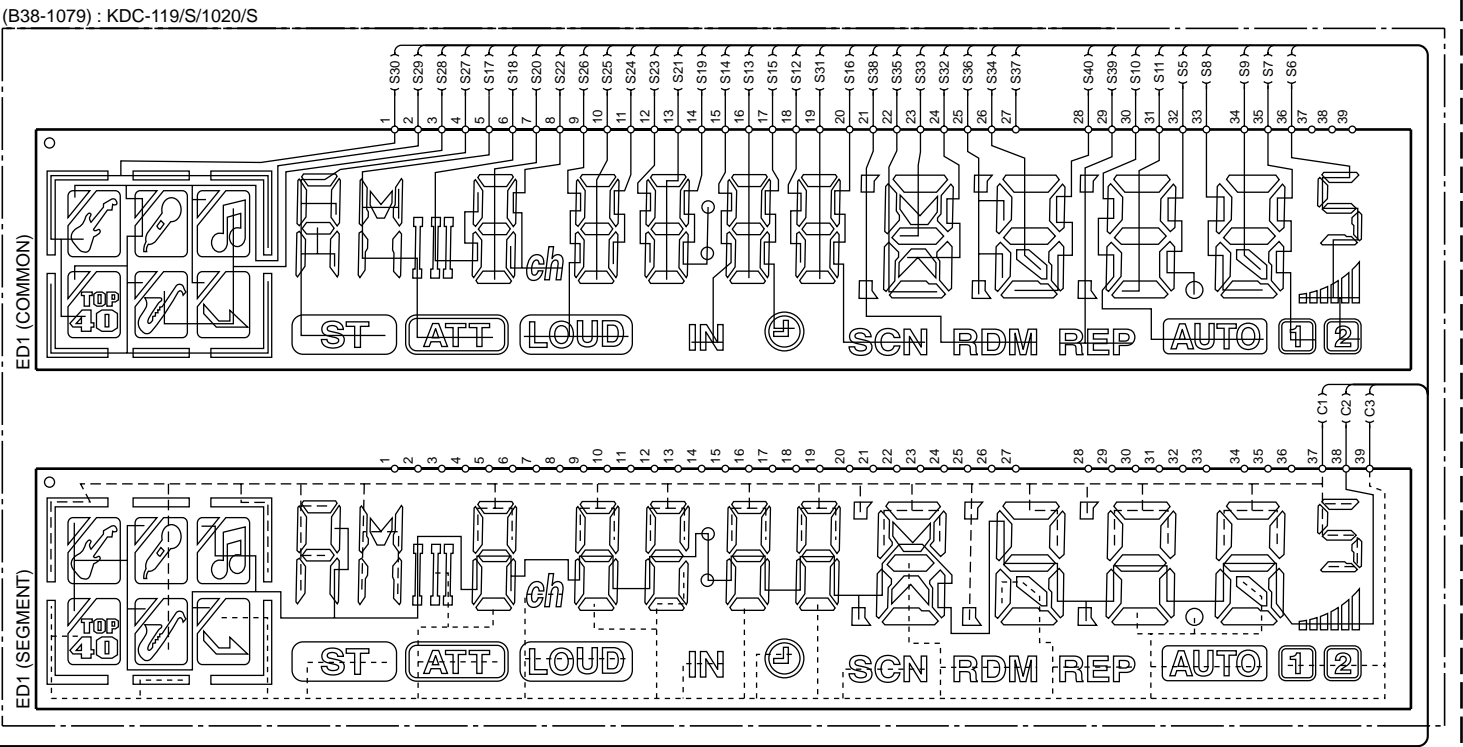
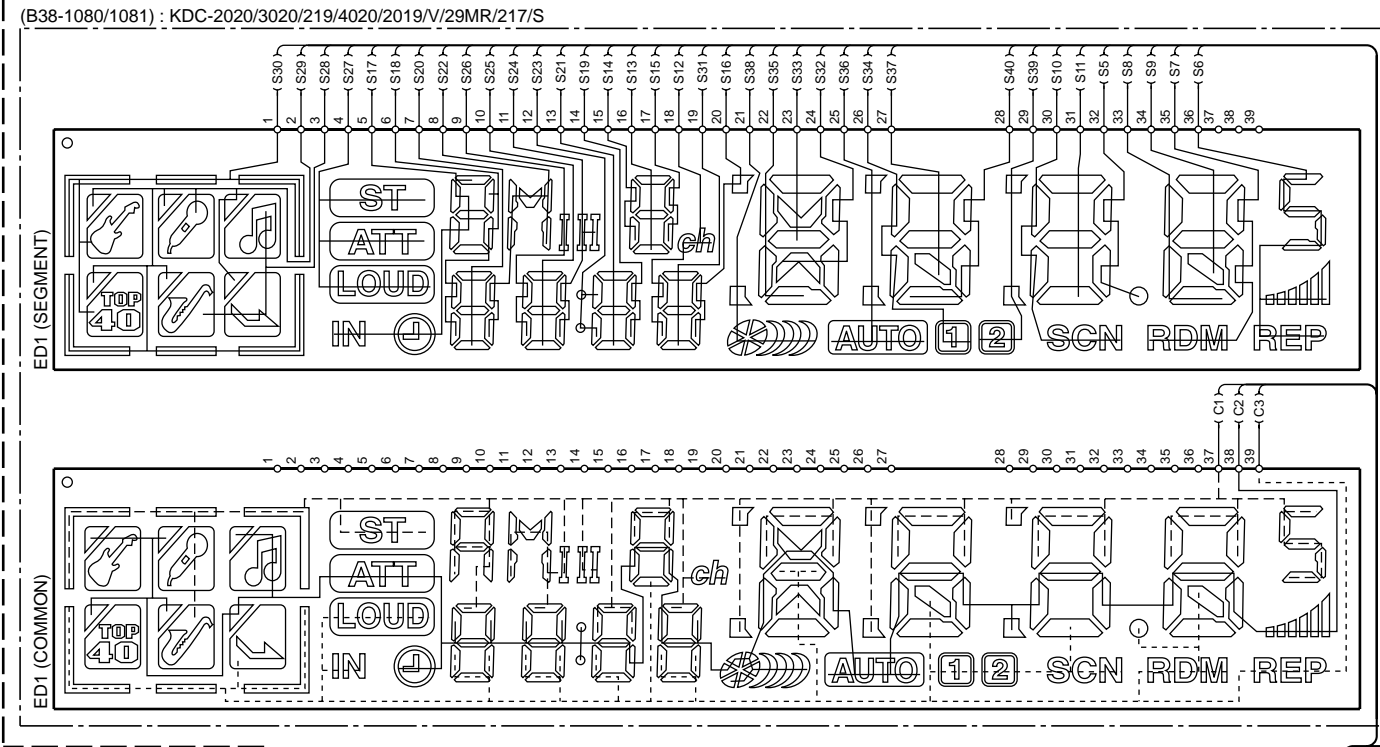
**CAUTION :** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.



SWITCH UNIT (X16-1460-XX)



IC1 : LC75853NE D1-13,20 : \*  
IC2 : RS-171 D17,18 : \*  
Q1 : DTA114EUA D22 : MA3062WA

————— GND LINE  
————— +B LINE

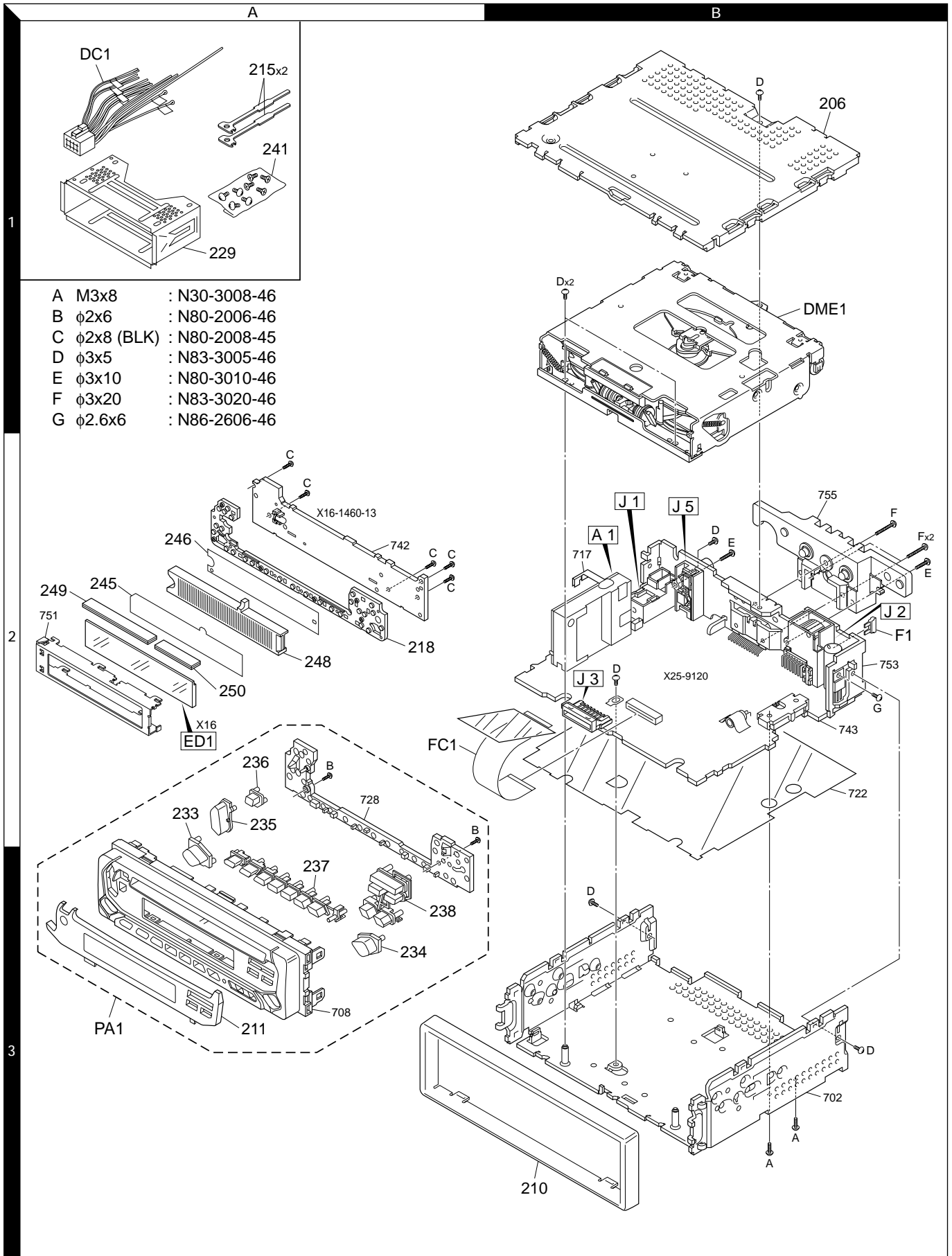
(X16-1460-XX)

MODEL NAME	UNIT No.	(A)	C6, 7	D1-13,20	D17,18	D19	R19, 20
KDC-2020 (M)	0-20	YES	NO	B30-1533-05 (GREEN)	B30-1533-05 (GREEN)	B30-1633-05	510
KDC-3020 (M)	0-21	YES	NO	B30-1567-05 (RED)	B30-1567-05 (RED)	B30-1641-05	510
KDC-219 (K)	0-11	YES	YES	B30-1533-05 (GREEN)	B30-1642-05 (BLUE)	B30-1633-05	390
KDC-4020 (M)	0-12	YES	NO	B30-1533-05 (GREEN)	B30-1533-05 (GREEN)	B30-1633-05	510
KDC-29MR (K)	0-13	NO	NO	B30-1533-05 (GREEN)	B30-1533-05 (GREEN)	B30-1633-05	510
KDC-119S (K)	0-14	NO	NO	B30-1533-05 (GREEN)	B30-1533-05 (GREEN)	B30-1633-05	510
KDC-1020 (M)	0-15	YES	YES	B30-1567-05 (RED)	B30-1642-05 (BLUE)	B30-1633-05	390

**CAUTION :** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  
△ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.  
• DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.



## EXPLODED VIEW



# KDC-1020/S/119/S

## PARTS LIST

\* New parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
<b>KDC-1020/1020S/119/119S</b>					
206	1B	*	A52-0804-02	TOP PLATE	
PA1	3A	*	A64-2556-02	PANEL ASSY	K0
PA1	3A	*	A64-2557-02	PANEL ASSY	M1
PA1	3A	*	A64-2559-02	PANEL ASSY	K1
PA1	3A	*	A64-2679-02	PANEL ASSY	M2
210	3B		B07-3054-02	ESCUTCHEON	K0K1M1
210	3B		B07-3055-02	ESCUTCHEON	M2
211	3A	*	B10-4144-01	FRONT GLASS	K0
211	3A	*	B10-4145-01	FRONT GLASS	M1
211	3A	*	B10-4147-01	FRONT GLASS	K1
211	3A	*	B10-4233-01	FRONT GLASS	M2
-			B46-0100-50	WARRANTY CARD	
-			B58-1344-04	CAUTION CARD	K0K1
-			B58-1365-04	CAUTION CARD	
-		*	B64-2114-00	INST.MANUAL (ENG.FRE.SPA.POR.)	K0K1
-		*	B64-2115-00	INSTRUCTION MANUAL (ENG.T-CHI.)	M1M2
-		*	B64-2116-00	INSTRUCTION MANUAL (ARABIC)	M1M2
-		*	B64-2208-00	INSTRUCTION MANUAL (S-CHINES)	M1
215	1A		D10-4589-04	LEVER	
218	2A	*	E29-1872-02	CONDUCTIVE RUBBER	
△ DC1	1A		E30-4783-05	DC CORD	K0K1
△ DC1	1A		E30-4784-05	DC CORD	M1M2
FC1	2A		E39-0343-05	FLAT CABLE	
△ F1	2B		F52-0006-05	FUSE (MINI BLADE TYPE)	
-		*	H10-4801-02	POLYSTYRENE FOAMED FIXTURE	
-			H25-0329-04	PROTECTION BAG (280X450X0.03)	
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-		*	H54-2289-03	ITEM CARTON CASE	K0
-		*	H54-2290-03	ITEM CARTON CASE	M1
-		*	H54-2315-03	ITEM CARTON CASE	K1
-		*	H54-2380-03	ITEM CARTON CASE	M2
229	1A		J21-9641-13	MOUNTING HARDWARE ASSY	
233	3A	*	K24-3823-04	KNOB (SRC)	
234	3A	*	K24-3824-04	KNOB (AUD)	
235	3A	*	K24-3825-03	KNOB (VOL)	
236	3A	*	K24-3826-04	KNOB (EJECT)	
237	3A	*	K25-1396-03	KNOB (PRE1-6,ATT,RESET)	
238	3A	*	K25-1397-03	KNOB (AUTO,CLK,FM,AM)	
241	1A	*	N99-1719-05	SCREW SET	
A	3B		N30-3008-46	PAN HEAD MACHINE SCREW	
B	3A		N80-2006-46	PAN HEAD TAPTITE SCREW	
C	2A		N80-2008-45	PAN HEAD TAPTITE SCREW	
D	1B		N83-3005-46	PAN HEAD TAPTITE SCREW	
DME1	1B	*	X92-4030-00	MECHANISM ASSY	
<b>SWITCH UNIT (X16-1460-13)</b>					
245	2A	*	B11-1358-04	OPTICAL DIFFUSER	
246	2A	*	B11-1359-04	REFLECTION SHEET	
248	2A	*	B19-2130-03	LIGHTING BOARD	
D1-13			B30-1533-05	LED (1608,PG)	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
D17,18			B30-1533-05	LED (1608,PG)	
D19			B30-1633-05	LED (WHITE)	
D20			B30-1533-05	LED (1608,PG)	
ED1		*	B38-1079-05	LIQUID CRYSTAL	
C1			CK73GB1H102K	CHIP C 1000PF	K
C2,3			CK73GB1E473K	CHIP C 0.047UF	K
C2,3			CK73GB1H473K	CHIP C 0.047UF	K
C4			CK73GB1H103K	CHIP C 0.010UF	K
C9			CK73GB1H103K	CHIP C 0.010UF	K
249	2A		E29-1829-04	CONDUCTIVE RUBBER	
250	2A		E29-1834-04	CONDUCTIVE RUBBER	
J1			E59-0828-05	RECTANGULAR PLUG	
-		*	J19-5130-04	HOLDER	
R2-4			RK73GB2A471J	CHIP R 470 J	1/10W
R5			RK73GB2A102J	CHIP R 1.0K J	1/10W
R7			RK73GB2A472J	CHIP R 4.7K J	1/10W
R8			RK73GB2A563J	CHIP R 56K J	1/10W
R10			RK73GB2A4R7J	CHIP R 4.7 J	1/10W
R14,15			RK73FB2B331J	CHIP R 330 J	1/8W
R16-20			RK73FB2B511J	CHIP R 510 J	1/8W
R21,22			RK73FB2B221J	CHIP R 220 J	1/8W
IC1			LC75853NE	MOS-IC	
Q1			DTA114EUA	DIGITAL TRANSISTOR	
Q1			UN5111	DIGITAL TRANSISTOR	
<b>ELECTRIC UNIT (X25-9120-14/22)</b>					
C1			C90-5242-05	ELECTRO 3300UF	16WV
C21			CK73GB1H103K	CHIP C 0.010UF	K
C40			CK73GB1H103K	CHIP C 0.010UF	K
C50			CE04NW1E100M	ELECTRO 10UF	25WV
C50,51			CE04NW1E100M	ELECTRO 10UF	25WV
C52-54			CE04NW1C100M	ELECTRO 10UF	16WV
C55			CE04NW1E100M	ELECTRO 10UF	25WV
C56			CE04CW1H100M	ELECTRO 10UF	50WV
C57			C90-2980-05	ELECTRO 220UF	16WV
C58			C90-2962-05	ELECTRO 100UF	16WV
C63			CE04NW1C220M	ELECTRO 22UF	16WV
C101			CE04NW0J101M	ELECTRO 100UF	6.3WV
C102			CK73GB1H103K	CHIP C 0.010UF	K
C103			CK73GB1C104K	CHIP C 0.10UF	K
C103			CK73GB1H104K	CHIP C 0.10UF	K
C104,105			CC73GCH1H150J	CHIP C 15PF	J
C106			CK73GB1H472K	CHIP C 4700PF	K
C142			CK73GB1C104K	CHIP C 0.10UF	K
C142			CK73GB1H104K	CHIP C 0.10UF	K
C201			CE04NW1A470M	ELECTRO 47UF	10WV
C202			CK73GB1H103K	CHIP C 0.010UF	K
C203-205			CE04NW1H2R2M	ELECTRO 2.2UF	50WV
C206			CK73GB1H153K	CHIP C 0.015UF	K
C207			CK73GB1A474K	CHIP C 0.47UF	K
C208,209			CK73GB1C104K	CHIP C 0.10UF	K
C208,209			CK73GB1H104K	CHIP C 0.10UF	K
C210			CK73GB1E333K	CHIP C 0.033UF	K
C210			CK73GB1H333K	CHIP C 0.033UF	K

E : Europe K : North America M : Other Areas

W : Without Europe

K0 : KDC-119

K1 : KDC-119S

M1 : KDC-1020

M2 : KDC-1020S

△ Indicates safety critical components.

## PARTS LIST

\* New parts

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## ELECTRIC UNIT (X25-9120-14/22)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C211			CC73GCH1H151J	CHIP C 150PF J		R113,114			RK73GB2A473J	CHIP R 47K J 1/10W	
C223,224			C90-2597-05	ELECTRO 10UF 16WV		R115			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C225			CK73GB1H103K	CHIP C 0.010UF K		R116			RK73GB2A103J	CHIP R 10K J 1/10W	
C251-254			C90-5296-05	NP-ELECT 0.22UF 50WV		R117			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C255			CE04NW1H010M	ELECTRO 1.0UF 50WV		R118			RK73GB2A103J	CHIP R 10K J 1/10W	
C256			CE04NW1A101M	ELECTRO 100UF 10WV	K0K1	R119			RK73GB2A473J	CHIP R 47K J 1/10W	
C256			CE04NW1A330M	ELECTRO 33UF 10WV	M1M2	R121			RK73GB2A222J	CHIP R 2.2K J 1/10W	
C257			CE04NW1H010M	ELECTRO 1.0UF 50WV		R122			RK73GB2A101J	CHIP R 100 J 1/10W	
C258			C90-2935-05	ELECTRO 1.0UF 50WV		R123			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C301			CE04NW1A101M	ELECTRO 100UF 10WV		R125			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C302,303			CK73GB1H103K	CHIP C 0.010UF K		R126			RK73GB2A104J	CHIP R 100K J 1/10W	
C304			CE04CW1A101M	ELECTRO 100UF 10WV		R127			RK73GB2A222J	CHIP R 2.2K J 1/10W	
C305			CK73GB1H103K	CHIP C 0.010UF K		R128			RK73GB2A225J	CHIP R 2.2M J 1/10W	
C306			C90-2594-05	ELECTRO 10UF 10WV		R129,130			RK73GB2A222J	CHIP R 2.2K J 1/10W	
C307			CK73GB1H103K	CHIP C 0.010UF K		R131			RK73GB2A682J	CHIP R 6.8K J 1/10W	
C309			CK73GB1H103K	CHIP C 0.010UF K		R132			RK73GB2A223J	CHIP R 22K J 1/10W	
CN1			E40-9550-05	FLAT CABLE CONNECTOR		R133			RK73GB2A164J	CHIP R 160K J 1/10W	
J1			E04-0312-05	RF COAXIAL CABLE RECEPTACLE		R136			RK73GB2A473J	CHIP R 47K J 1/10W	K0K1
J2			E58-0863-15	RECTANGULAR RECEPTACLE		R136,137			RK73GB2A473J	CHIP R 47K J 1/10W	M1M2
J3			E58-0880-05	RECTANGULAR RECEPTACLE		R138,139			RK73GB2A473J	CHIP R 47K J 1/10W	K0K1
J5			E63-0852-05	PIN JACK		R139			RK73GB2A473J	CHIP R 47K J 1/10W	M1M2
L1			L33-1170-05	CHOKE COIL ASSY		R143			RK73GB2A472J	CHIP R 4.7K J 1/10W	
L2			L33-1807-05	CHOKE COIL		R144			RK73GB2A104J	CHIP R 100K J 1/10W	
L4			L33-1123-05	LINE FILTER COIL		R201			RK73GB2A272J	CHIP R 2.7K J 1/10W	
L101			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH,J)		R202,203			RK73GB2A472J	CHIP R 4.7K J 1/10W	
L201			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH,J)		R223,224			RK73FB2B271J	CHIP R 270 J 1/8W	
L303-306			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH,J)		R251			RK73GB2A472J	CHIP R 4.7K J 1/10W	K0K1
X1			L77-1167-05	CRYSTAL RESONATOR (4.19M)		R254			RK73GB2A472J	CHIP R 4.7K J 1/10W	K0K1
D	2B		N83-3005-46	PAN HEAD TAPTITE SCREW		R255			RK73GB2A333J	CHIP R 33K J 1/10W	
E	2B		N80-3010-46	PAN HEAD TAPTITE SCREW		R256			RK73FB2B102J	CHIP R 1.0K J 1/8W	
F	2B		N83-3020-46	PAN HEAD TAPTITE SCREW		R257		*	RK73GB2A362J	CHIP R 3.6K J 1/10W	
G	2B		N86-2606-46	BINDING HEAD TAPTITE SCREW		R258			RK73GB2A101J	CHIP R 100 J 1/10W	K0K1
CP1			R90-1056-05	MULTIPLE RESISTOR		R258			RK73GB2A221J	CHIP R 220 J 1/10W	M1M2
CP2			R90-1047-05	MULTIPLE RESISTOR		R260			RK73GB2A751J	CHIP R 750 J 1/10W	K0K1
CP3			R90-1046-05	MULTIPLE RESISTOR		R261		*	RK73GB2A100J	CHIP R 10 J 1/10W	M1M2
R10			RK73FB2B303J	CHIP R 30K J 1/8W		R261			RK73GB2A431J	CHIP R 430 J 1/10W	K0K1
R11			RK73GB2A103J	CHIP R 10K J 1/10W		R263			RK73GB2A184J	CHIP R 180K J 1/10W	K0K1
R12			RK73GB2A104J	CHIP R 100K J 1/10W		R263			RK73GB2A432J	CHIP R 4.3K J 1/10W	M1M2
R20			RD14DB2H332J	SMALL-RD 3.3K J 1/2W		R264			RK73GB2A473J	CHIP R 47K J 1/10W	
R22			RK73GB2A103J	CHIP R 10K J 1/10W		R415			RK73GB2A104J	CHIP R 100K J 1/10W	
R23			RK73GB2A104J	CHIP R 100K J 1/10W		W151			R92-2053-05	CHIP R 0 J 1/8W	
R51			RK73GB2A473J	CHIP R 47K J 1/10W		W152			R92-1252-05	CHIP R 0 OHM J 1/16W	
R57		*	RK73FB2B152J	CHIP R 1.5K J 1/8W		W155			R92-1252-05	CHIP R 0 OHM J 1/16W	
R58			RK73GB2A472J	CHIP R 4.7K J 1/10W		W156,157			R92-2053-05	CHIP R 0 J 1/8W	
R67			RK73GB2A103J	CHIP R 10K J 1/10W		W158,159			R92-1252-05	CHIP R 0 OHM J 1/16W	
R71		*	RK73GB2A823J	CHIP R 82K J 1/10W		W160-165			R92-2053-05	CHIP R 0 J 1/8W	
R72		*	RK73GB2A363J	CHIP R 36K J 1/10W		W167-169			R92-1252-05	CHIP R 0 OHM J 1/16W	
R73			RK73GB2A104J	CHIP R 100K J 1/10W		W171-174			R92-1252-05	CHIP R 0 OHM J 1/16W	
R103,104			RK73GB2A222J	CHIP R 2.2K J 1/10W		W176-178			R92-1252-05	CHIP R 0 OHM J 1/16W	M1M2
R105			RK73GB2A471J	CHIP R 470 J 1/10W		W179			R92-2052-05	CHIP R 0 OHM J 1/10W	
R106			RK73GB2A104J	CHIP R 100K J 1/10W		D1			S2V20*A	DIODE	
R107,108			RK73GB2A222J	CHIP R 2.2K J 1/10W		D1			1N5393G-M6	DIODE	
R110			RK73GB2A472J	CHIP R 4.7K J 1/10W		D10			MA4068(N)-M	ZENER DIODE	
						D11			D1F60	DIODE	M1M2
						D12			AM01Z	DIODE	M1M2

E : Europe K : North America M : Other Areas

W : Without Europe

K0 : KDC-119

K1 : KDC-119S

M1 : KDC-1020

M2 : KDC-1020S

△ Indicates safety critical components.

## PARTS LIST

\* New parts

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## ELECTRIC UNIT (X25-9120-14/22)

Ref. No.	Add	New	Parts No.	Description	Destination
D12			DSM1SD2	DIODE	M1M2
D12			ERA15-02	DIODE	M1M2
D13			D1F60	DIODE	
D14			AM01Z	DIODE	
D14			DSM1SD2	DIODE	
D14			ERA15-02	DIODE	
D20			MA4068(N)-M	ZENER DIODE	
D40			1SS133	DIODE	
D50			1SS133	DIODE	
D51			HZS9A1L	ZENER DIODE	
D51			MA4082(N)-L	ZENER DIODE	
D70			MA4068(N)-M	ZENER DIODE	
D101			1SS133	DIODE	
D103,104			1SS133	DIODE	
D201,202			MA4068(N)-M	ZENER DIODE	
D251-253			1SS133	DIODE	
D261-263			AM01Z	DIODE	M1M2
D261-263			DSM1SD2	DIODE	M1M2
D261-263			ERA15-02	DIODE	M1M2
D264			D1F60	DIODE	M1M2
D264		*	S1J	DIODE	M1M2
D265,266			AM01Z	DIODE	M1M2
D265,266			DSM1SD2	DIODE	M1M2
D265,266			ERA15-02	DIODE	M1M2
D267,268			D1F60	DIODE	M1M2
D267,268		*	S1J	DIODE	M1M2
IC1		*	UPD780058GC430	MI-COM IC	
IC2			TDA7407D	ANALOGUE IC	
IC4			TDA7386	ANALOGUE IC	K0K1
IC4			TDA7560	ANALOGUE IC	M1M2
IC7			BA4911-V4	ANALOGUE IC	
IC8			HD74HC27FP	MOS-IC	
IC11			S-80835ANNP	MOS-IC	
IC12			BR24C01AF	MEMORY IC	
IC12			BR24C01AF-W	MEMORY IC	
IC12			M24C01-WMN6T	MEMORY IC	
IC12			S-24C01B	MEMORY IC	
Q10			2SC4081	TRANSISTOR	
Q10			2SD1819A	TRANSISTOR	
Q20			2SC4081	TRANSISTOR	
Q20			2SD1819A	TRANSISTOR	
Q40			DTA124EUA	DIGITAL TRANSISTOR	
Q40			UN5112	DIGITAL TRANSISTOR	
Q50			2SA1036K	TRANSISTOR	
Q51			UMC2N	TRANSISTOR	
Q53			UMC2N	TRANSISTOR	M1M2
Q55			2SD2375	TRANSISTOR	
Q55			2SD2396	TRANSISTOR	
Q70			2SC4081	TRANSISTOR	
Q70			2SD1819A	TRANSISTOR	
Q223,224			DTC143TUA	DIGITAL TRANSISTOR	
Q223,224			UN5216	DIGITAL TRANSISTOR	
Q251			DTC114YUA	DIGITAL TRANSISTOR	
Q251			UN5214	DIGITAL TRANSISTOR	
TH1			PTH9C42BE471Q	POSITIVE RESISTOR	

Ref. No.	Add	New	Parts No.	Description	Destination
A1		*	X86-3510-11	FRONT-END UNIT	

E : Europe K : North America M : Other Areas

W : Without Europe

K0 : KDC-119

K1 : KDC-119S

M1 : KDC-1020

M2 : KDC-1020S

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# KDC-1020/S/119/S

## SPECIFICATIONS

### KDC-119/119S (K-TYPE)

#### FM

Frequency Range ..... 87.9MHz~107.9MHz  
Frequency step ..... 200kHz  
(Channel Space Slection) ..... (50k/200kHz)  
Usable Sensitivity (S/N : 30dB) ..... 9.3dBf (0.8μV/75Ω)  
Quieting Sensitivity (S/N 50dB) ..... 15.2dBf (1.6μV/75Ω)  
Frequency Response (±3.0dB) ..... 30Hz~15kHz  
S/N ..... 70dB (MONO)  
Selectivity ..... ≥80dB (±400kHz)  
Stereo Separation ..... 40dB (1kHz)

#### AM

Frequency Range ..... 530kHz~1700kHz  
Frequency step ..... 10kHz  
(Channel Space Selection) ..... (9k/10kHz)  
Usable Sensitivity (S/N : 20dB) ..... 28dBμ (25μV)

#### CD

Laser Diode ..... GaAlAs (λ=780nm)  
Digital Filter (D/A) ..... 8 times Over Sampling  
D/A Converter ..... 1 Bit  
Spindle Speed ..... 500~200 (CLV)  
Wow & Flutter ..... Below Mesurable Limit  
Frequency Respons ..... 10~20kHz (±1dB)  
THD ..... 0.01% (1kHz)  
S/N Ratio (dB) ..... 96dB (1kHz)  
Dynamic Range ..... 93dB  
Channel Separation ..... 85dB

Preout Level (mV)/Load ..... 1800mV/10kΩ (CD)  
Preout Impedance (Ω) ..... ≤600Ω

#### AMP

Maximum Power ..... 45wx4  
Full Bandwidth Power (at Less than 1%THD) ..... 22wx4

#### TONE

Bass ..... 100Hz±10dB  
Middle ..... 1kHz±10dB  
Treble ..... 10kHz±10dB

#### GENERAL

Operating voltage (11~16v allowable) ..... 14.4V  
Current Consumption ..... 10A  
Installation Size (Width) ..... 182mm (7-3/16 inch)  
(Height) ..... 53mm (2-1/16 inch)  
(Depth) ..... 157mm (6-3/16 inch)  
Weight ..... 3.1 lbs (1.4kg)

### KDC-1020/1020S (M-TYPE)

#### FM

Frequency Range ..... 87.5MHz~108.0MHz  
Frequency step ..... 50kHz  
Frequency Range ..... 87.9MHz~107.9MHz  
Frequency step ..... 200kHz  
(Channel Space Slection) ..... (50k/200kHz)  
Usable Sensitivity (S/N : 30dB) ..... 9.3dBf (0.8μV/75Ω)  
Quieting Sensitivity (S/N 50dB) ..... 15.2dBf (1.6μV/75Ω)  
Frequency Response (±3.0dB) ..... 30Hz~15kHz  
S/N ..... 70dB (MONO)  
Selectivity ..... ≥80dB (±400kHz)  
Stereo Separation ..... 40dB (1kHz)

#### AM

Frequency Range ..... 531kHz~1611kHz  
Frequency step ..... 9kHz  
Frequency Range ..... 530kHz~1700kHz  
Frequency step ..... 10kHz  
(Channel Space Selection) ..... (9k/10kHz)  
Usable Sensitivity (S/N : 20dB) ..... 28dBμ (25μV)

#### CD

Laser Diode ..... GaAlAs (λ=780nm)  
Digital Filter (D/A) ..... 8 times Over Sampling  
D/A Converter ..... 1 Bit  
Spindle Speed ..... 500~200 (CLV)  
Wow & Flutter ..... Below Mesurable Limit  
Frequency Respons ..... 10~20kHz (±1dB)  
THD ..... 0.01% (1kHz)  
S/N Ratio (dB) ..... 96dB (1kHz)  
Dynamic Range ..... 93dB  
Channel Separation ..... 85dB

Preout Level (mV)/Load ..... 1800mV/10kΩ (CD)  
Preout Impedance (Ω) ..... ≤600Ω

#### AMP

Maximum Power ..... 50wx4  
Full Bandwidth Power (at Less than 1%THD) ..... 22wx4

#### TONE

Bass ..... 100Hz±10dB  
Middle ..... 1kHz±10dB  
Treble ..... 10kHz±10dB

#### GENERAL

Operating voltage (11~16v allowable) ..... 14.4V  
Current Consumption ..... 10A  
Installation Size (Width) ..... 182mm (7-3/16 inch)  
(Height) ..... 53mm (2-1/16 inch)  
(Depth) ..... 157mm (6-3/16 inch)  
Weight ..... 3.1 lbs (1.4kg)

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KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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